(FILE 'HOME' ENTERED AT 08:51:12 ON 31 AUG 2005)

FILE 'MEDLINE, BIOSIS, EMBASE, CAPLUS' ENTERED AT 08:51:21 ON 31 AUG 2005

L1 1789 S PERILLA(P) OIL

L2 24 S L1 AND ((PLATELET (5W) AGGREGAT?) OR THROMBOSIS OR (PLATELET

L3 17 DUP REM L2 (7 DUPLICATES REMOVED)

L3 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2005:483193 CAPLUS
DN 143:6727
TI Necessary nutrient-equalizing edible harmonic oil
IN Wang, Lu; Xu, Fuben; Cao, Qinghui
PA Jiangsu Ruidisheng Science and Technology Co. Ltd., Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1425312	A	20030625	CN 2002-148493	20021211
PRAI CN 2002-148493		20021211		

AB The title harmonic **oil** contains purple common **perilla** **oil** and peanut **oil**, with α-linolenic acid and linoleic acid at a ratio of 1:4-6. The content of α-linolenic acid and linoleic acid is >45% in edible harmonic **oil**. The harmonic **oil** may also contain soybean **oil** with α- linolenic acid and linoleic acid. The product has no EPA, and can prevent obesity, hyperlipemia, and thrombus disease.

L3 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:973253 CAPLUS
DN 138:204223
TI Effects of dietary fat levels on lipid parameters and eicosanoids production of rats under fixed N-6/N-3 and P/S fatty acid ratios
AU Lee, Joon Ho; Ikeda, Ikuo; Sugano, Michihiro
CS Department of Consumer's Life Information, Chungnam National University, Taejon, 305-764, S. Korea
SO Nutritional Sciences (2002), 5(4), 184-189
CODEN: NSUCC5; ISSN: 1229-232X
PB Korean Nutrition Society
DT Journal
LA English
AB The effects of dietary fat levels on lipid metabolism under fixed P/S (1.3) and n-6/n-3 (5.1) fatty acid ratios were examined in rats using palm **oil**, soybean **oil** and **perilla** **oil**. These ratios correspond to the recommended composition of dietary fat for humans. The range of dietary fat levels was 5-20% by weight (11.8-39.3% of total energy). The levels of dietary fat did not influence the concns. of serum and liver cholesterol, whereas the level of triglycerides was gradually elevated with increasing levels of dietary fat, especially in the liver. The fatty acid composition of tissue phosphatidylcholine seemed to vary with the different levels of fat. The ratio of linoleic acid to arachidonic acid was increased more significantly in the heart than in the liver. In adipose tissue total lipids, the percentages of saturated and monounsatd. fatty acids decreased, whereas the percentage of polyunsatd. fatty acid increased, with increasing dietary fat levels. In addition, though the level of aortic prostacyclin was not uniformly affected by increasing dietary fat levels, thromboxane A2 production by platelets tended to increase with higher levels of dietary fat, suggesting an increased risk of **thrombosis** in this situation. Thus, even though dietary fat may have desirable compns. of fatty acids, these excessive consumption can produce unfavorable metabolic responses.
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:911597 CAPLUS
DN 142:204557
TI Agent for inhibiting coagulation of blood platelet containing **perilla** **oil** as effective component
IN Kim, Man Sik
PA S. Korea
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given

CODEN: KRXXA7
DT Patent
LA Korean
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	KR 2001076112	A	20010811	KR 2000-3541	20000125
PRAI	KR 2000-3541		20000125		

AB An agent for inhibiting coagulation of a blood platelet containing **perilla oil** as an effective ingredient is provided, which has an effect on lowering fatty acid in blood and blood pressure and formation of a thrombus. This agent for inhibiting coagulation of a blood platelet contains **perilla oil** containing a large amount of α-LNA as the parent of ω-3 based fatty acid as an effective ingredient. The agent has an effect on strengthening a cerebral nerve system function, inhibiting an allergic reaction and shows an anticancer effect.

L3 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:911559 CAPLUS
DN 142:204555
TI Fat lowering agent in blood containing **perilla oil** as effective component
IN Kim, Man Sik
PA S. Korea
SO Repub. Korean Kongkae Taeho Kongbo, No pp. given
CODEN: KRXXA7
DT Patent
LA Korean
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	KR 2001074415	A	20010804	KR 2000-3500	20000125
PRAI	KR 2000-3500		20000125		

AB A fat lowering agent containing **perilla oil** as an effective ingredient is provided, which has an effect on lowering fatty acid in blood and blood pressure and inhibiting coagulation of a thrombocyte and formation of a thrombus. This fat lowering agent in blood contains **perilla oil** containing a large amount of α-LNA as the parent of ω-3 based fatty acid as an effective ingredient. The agent has an effect on strengthening a cerebral nerve system function, inhibiting an allergic reaction and shows an anticancer effect.

L3 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:111365 CAPLUS
DN 134:162221
TI Fat compositions containing glycerides containing specified amounts of ω-3 unsaturated and monoenoic acyl groups
IN Koike, Makoto; Hosoya, Naoki; Ishibashi, Minoru; Yasumasu, Takeshi
PA Kao Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001040386	A2	20010213	JP 1999-220012	19990803
	CA 2381091	AA	20010215	CA 2000-2381091	20000706
	WO 2001010989	A1	20010215	WO 2000-JP4499	20000706
	W: BR, CA, CN, US				
	RW: DE, ES, FI, FR, GB, IT, NL				
	BR 2000012922	A	20020514	BR 2000-12922	20000706
	EP 1211305	A1	20020605	EP 2000-944292	20000706
	R: DE, ES, FR, GB, IT, NL, FI				
	US 2002142089	A1	20021003	US 2002-32493	20020102
	US 6762203	B2	20040713		

	US 2003072858	A1	20030417	US 2002-61286	20020204
	US 6852758	B2	20050208		
	US 2004151824	A1	20040805	US 2004-761358	20040122
PRAI	JP 1999-220012	A	19990803		
	JP 1999-239970	A	19990826		
	WO 2000-JP4499	W	20000706		
	US 2002-32493	A3	20020102		

AB The invention relates to a fat composition suitable for use in a food and a pharmaceutical for prevention of **platelet aggregation**, wherein the composition contains triglyceride 0.1-59.8, diglyceride 40-99.7, monoglyceride 0.1-10, and free fatty acid ≤ 5 %, and wherein the amount of ω-3-unsatd. acyl group in the diglyceride is 15-89.5, and the amount of monoenoic acyl groups is 10-84.5 %. **Perilla oil** was transesterified with glycerin, and fractionated by silicagel column chromatog. Then triglyceride 34.5, diglyceride 63.9, monoglyceride 0.5, free fatty acid 0.5, and polyglyceride 0.6 % were combined to obtain a fat composition for french dressing.

L3 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2001:362975 CAPLUS
DN 134:339957
TI Effects of Korean leek and dietary fat on plasma lipids and **platelet aggregation** in hypercholesterolemic rats
AU Hong, Sea-Ah; Wang, Soo-Gyoung
CS Department of Food and Nutrition, Taejon University, Taejon, 302-150, S. Korea
SO Hanguk Yongyang Hakhoechi (2000), 33(4), 374-385
CODEN: HYHJA3; ISSN: 0367-6463
PB Korean Nutrition Society
DT Journal
LA Korean
AB The effects of Korean leek (Allium tuberosum) on blood plasma lipids and blood **platelet aggregation** were studied in hypercholesterolemic Sprague-Dawley rats fed 3 different dietary fats (**perilla oil**, corn **oil**, lard). Korean leek was prepared by drying and milling. Powdered cellulose and powdered Korean leek were added to exptl. diets at 0 or 5%. The rats were fed a hyperlipidemic diet for 4 wk to induce hyperlipidemia, followed by 4-wk feeding the 9 exptl. diets (diets with the 3 oils alone or oils plus leek or cellulose). Blood serum concns. of total lipids, total triglycerides, total cholesterol, and LDL-cholesterol decreased in the order of **perilla oil**, corn **oil**, and lard diets. Korean leek decreased the total lipids, total cholesterol, LDL-cholesterol, **platelet** counts, prothrombin time, and **platelet aggregation** in rats fed the lard diet. Thus, Korean leek may be helpful in the prevention and treatment of hyperlipidemia and blood **platelet aggregation** disorders.

L3 ANSWER 7 OF 17 MEDLINE on STN DUPLICATE 1
AN 2000199490 MEDLINE
DN PubMed ID: 10737229
TI Long-term effects of dietary alpha-linolenic acid from **perilla oil** on serum fatty acids composition and on the risk factors of coronary heart disease in Japanese elderly subjects.
AU Ezaki O; Takahashi M; Shigematsu T; Shimamura K; Kimura J; Ezaki H; Gotoh T
CS Division of Clinical Nutrition, National Institute of Health and Nutrition, Tokyo, Japan.. ezaki@nih.go.jp
SO Journal of nutritional science and vitaminology, (1999 Dec) 45 (6) 759-72.
Journal code: 0402640. ISSN: 0301-4800.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200006
ED Entered STN: 20000616
Last Updated on STN: 20000616
Entered Medline: 20000606

AB Although important roles of dietary n-3 fatty acids in the prevention of coronary heart disease (CHD) have been suggested, long-term effects of dietary alpha-linolenic acid (ALA, 18:3n-3) have not yet been established under controlled conditions. We tested whether a moderate increase of dietary ALA affects fatty acids composition in serum and the risk factors of CHD. Oxidized LDL (OxLDL) was directly measured by ELISA using antibody specific to OxLDL. By merely replacing soybean cooking **oil** (SO) with **perilla oil** (PO) (i.e., increasing 3 g/d of ALA), the n-6/n-3 ratio in the diet was changed from 4:1 to 1:1. Twenty Japanese elderly subjects were initially given a SO diet for at least 6 mo (baseline period), a PO diet for 10 mo (intervention period), and then returned to the previous SO diet (washout period). ALA in the total serum lipid increased from 0.8 to 1.6% after 3 mo on the PO diet, but EPA and DHA increased in a later time, at 10 mo after the PO diet, from 2.5 to 3.6% and 5.3 to 6.4%, respectively ($p<0.05$), and then returned to baseline in the washout period. In spite of increases of serum n-3 fatty acids, the OxLDL concentration did not change significantly when given the PO diet. Body weight, total serum cholesterol, triacylglycerol, glucose, insulin and HbA1c concentrations, **platelet** count and **aggregation** function, prothrombin time, partial thromboplastin time, fibrinogen and PAI-1 concentration, and other routine blood analysis did not change significantly when given the PO diet. These data indicate that, even in elderly subjects, a 3 g/d increase of dietary ALA could increase serum EPA and DHA in 10 mo without any major adverse effects.

L3 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1997:682949 CAPLUS
DN 127:275944
TI Effects of **Perilla** frutescens (L.) Britt. **oil** on blood lipid and hemorrheology in rats
AU Xu, Zhanghua; Shao, Yufen; Zhu, Guohui
CS Dep. Nutr. Food Hygiene, Shanghai Med. Univ., Shanghai, 200032, Peop. Rep. China
SO Yingyang Xuebao (1997), 19(1), 11-15
CODEN: YYHPA4; ISSN: 0512-7955
PB Yingyang Xuebao Bianjibu
DT Journal
LA Chinese
AB The effects of **perilla oil** on rats' serum triglyceride (TG), total cholesterol (TC), high d. lipoprotein cholesterol (HDL-C), low d. lipoprotein cholesterol (LDL-C), **platelet aggregation**, and erythrocyte deformity index were observed Rats were divided into lard group, **perilla oil** group and control group, and bred for two and half months. Two test groups were fed high lipid diet. 30 Days later, serum TC was significantly lower in **perilla oil** group than in lard group ($P < 0.05$). At the end of experiment, significant decreases in serum TC, TG, LDL-C were observed in **perilla oil** group compared with the lard group ($P < 0.05$), and significant increases in serum HDL-C/TC in **perilla oil** group ($P < 0.05$), but there was no difference in serum HDL-C among the three groups ($P > 0.05$). As for **platelet aggregation**, there was no difference between te control group and **perilla oil** group. Erythrocyte deformity index was the lowest in the control group, followed by **perilla oil** group, the highest was lard group, but there was no significant difference between the latter two groups ($P > 0.05$). The results suggest that **perilla oil** rich in α-linolenic acid could be used to prevent and lower blood lipid.

L3 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1996:630055 CAPLUS
DN 126:88703
TI Effects of α-linolenic acid (**perilla oil**) on serum lipids, fatty acid compositions, blood **platelet aggregation**, blood coagulation system, and lipid peroxides
AU Satowa, Sumie; Ebinuma, Haruyo; Okido, Tuyako; Miyakawa, Toyomi
CS Wayo Women's Univ., Ichikawa, 272, Japan

SO Wayo Joshi Daigaku Kiyo, Kaseikei-hen (1996), 36, 1-12
CODEN: WJDKEG; ISSN: 0916-0035
PB Wayo Joshi Daigaku
DT Journal
LA Japanese
AB **Perilla oil** (20 g) containing 57% α-linolenic acid was taken by humans every day for 2 wks (group A) and every other day for 4 wks (group B). Total cholesterol (Ch) in sera of group A decreased at 1 wk and increased at 2 wks. That of group B decreased at 2 and 3 wks and increased after the intake. Triglyceride level of group A and B decreased at 1 wk and 2 wks, resp. HDL-Ch increased, and LDL-Ch and lipoproteins decreased in sera of group B increased. Changes in apoproteins, fatty acid compn, and lipid peroxide in sera, repression of blood **platelet aggregation**, and periods of bleeding and fibrin formation were also investigated.

L3 ANSWER 10 OF 17 EMBASE
on STN
AN 95373117 EMBASE
DN 1995373117
TI Effects of intravenous **perilla oil** emulsion on nutritional status, polyunsaturated fatty acid composition of tissue phospholipids, and thromboxane A2 production in streptozotocin-induced diabetic rats.
AU Ikeda A.; Inui K.; Fukuta Y.; Kokuba Y.; Sugano M.
CS Research Laboratories, Roussel Morishita Co., Ltd., 1658, Oshinohara, Yasu-cho,Yasu-gun, Shiga 520-23, Japan
SO Nutrition, (1995) Vol. 11, No. 5, pp. 450-455.
ISSN: 0899-9007 CODEN: NUTRER
CY United States
DT Journal; Article
FS 029 Clinical Biochemistry
030 Pharmacology
037 Drug Literature Index
LA English
SL English
ED Entered STN: 960127
Last Updated on STN: 960127
AB The effects of a **perilla oil** (PO) emulsion rich in α-linolenic acid, administered by intravenous infusion, on nutritional status, fatty acid composition, and thromboxane A2 production were compared with those of a soybean **oil** (SO) emulsion in streptozotocin-induced diabetic rats given a fat-free diet for 7 days. The PO emulsion improved body weight gain and nitrogen balance compared with the SO emulsion and reduced thromboxane A2 production by platelets. The PO emulsion also increased the proportion of eicosapentaenoic acid, but decreased that of arachidonic acid, in liver and serum phospholipids. Plasma insulin concentrations and blood biochemical indices were similar in the two groups. An intravenously infused PO emulsion effectively reduces thromboxane A2 production through changes in the fatty acid composition of liver and serum phospholipids, as with oral administration, and improves the nutritional statue of diabetic rats.

L3 ANSWER 11 OF 17 CAPLUS
AN 1992:489196 CAPLUS
DN 117:89196
TI α-Linolenic acid-containing beverages
IN Okyama, Atsushi; Mukai, Akira
PA Ajinomoto K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04063579	A2	19920228	JP 1990-175967	19900703
PRAI	JP 1990-175967		19900703		

AB Beverages, useful for prevention and treatment of **thrombosis**, arteriosclerosis, hypertension, allergies, etc. contain 0.5-30 weight% α-linolenic acid (I). The rancid odor or **perilla oil** odor resulting from I are optionally masked by addition of roasted seed flavors and/or exts. of Labiatae to the beverages.

L3 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1991:491125 CAPLUS
DN 115:91125
TI Antithrombotic nutrient composition containing potato protein hydrolysates and oil or fat
IN Sonaka, Ichiro; Kobayashi, Tetsuo; Futami, Yuko; Kitahara, Yoshiro; Sukegawa, Eiji
PA Ajinomoto Co., Inc., Japan
SO Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 435683	A1	19910703	EP 1990-314365	19901228
	R: DE, FR, GB				
	JP 03224463	A2	19911003	JP 1990-324762	19901127
	JP 2932684	B2	19990809		
PRAI	JP 1989-342211	A	19891229		

AB A nutrient composition for use in the treatment of **thrombosis** comprising (1) potato protein and/or an enzymic hydrolyzate thereof and (2) **oil** and/or fat (containing e.g., α-linolenic acid and/or linoleic acid as fatty acid components) is described. The **oil** is e.g. a mixture of wheat germ **oil** and **perilla oil**. In rats fed a 0.5% cholesterol diet which also contained potato protein enzymic hydrolyzate and a blend of wheat germ **oil** and **perilla oil**, there was no increase in plasma cholesterol levels and **platelet aggregation** was significantly reduced.

L3 ANSWER 13 OF 17 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN DUPLICATE 2
AN 1992:75516 BIOSIS
DN PREV199293043971; BA93:43971
TI UTILIZATION OF N-3 PLANT OILS PERILLA AND FLAXSEED OILS.
AU HIRANO J [Reprint author]; ISODA Y; NISHIZAWA Y
CS TSUKUBA RES LAB, NIPPON OIL AND FATS CO LTD, 5-10 TOKODAI, TSUKUBA-SHI 300-26
SO Journal of the Japan Oil Chemists' Society, (1991) Vol. 40, No. 10, pp. 942-950.
CODEN: YKGKAM. ISSN: 0513-398X.
DT Article
FS BA
LA JAPANESE
ED Entered STN: 2 Feb 1992
Last Updated on STN: 2 Feb 1992
AB **Perilla** and flaxseed oils (n-3 family) have many beneficial effects as compared to common n-6 family oils. Based on the results of animal test, physiological functions of these oils are reviewed. While these oils suppressed the development of cancer, **thrombosis** and allergic reaction, they enhanced the activity of brain and nerve systems. In the long-term feeding test of animals, **perilla oil** diet gave less hydroperoxide concentration of plasma and liver phospholipid than that in the fish **oil** diet.

L3 ANSWER 14 OF 17 MEDLINE on STN DUPLICATE 3
AN 89376637 MEDLINE
DN PubMed ID: 2776241
TI Effect of dietary alpha-linolenate/linoleate balance on collagen-induced **platelet aggregation** and serotonin release in rats.
AU Watanabe S; Suzuki E; Kojima N; Kojima R; Suzuki Y; Okuyama H

SO Chemical & pharmaceutical bulletin, (1989 Jun) 37 (6) 1572-5.
Journal code: 0377775. ISSN: 0009-2363.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198910
ED Entered STN: 19900309
Last Updated on STN: 19900309
Entered Medline: 19891020
AB Male Sprague-Dawley rats at 3 weeks of age were weaned to a diet supplemented either with **perilla** seed **oil** [alpha-linolenic acid (alpha-LnA)/linoleic acid (LA) = 3.66] or with safflower seed **oil** (alpha-LnA/LA less than 0.01) for 5-6 weeks. The eicosapentaenoic acid (EPA)/arachidonic acid (AA) ratio in platelet phospholipids was much higher in the **perilla oil** group than in the safflower **oil** group. Platelet aggregability determined turbidometrically varied greatly among individual animals, and the difference in platelet aggregability between the two dietary groups was relatively small when higher concentrations (15 and 20 micrograms/ml) of collagen were used. However, when platelet aggregability was determined as an all-or-none phenomenon at lower concentrations (7.5 and 10 micrograms/ml) of collagen, a very distinct difference was observed between the two dietary groups; aggregability was much lower in the **perilla oil** group than in the safflower **oil** group. Collagen-induced serotonin release from platelets was significantly reduced in the **perilla oil** group as compared with the safflower **oil** group. These results emphasize the importance of estimating aggregability at threshold concentrations of collagen and confirm that dietary manipulation of the essential fatty acid balance could be useful in reducing the thrombotic tendency.

L3 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1989:191536 CAPLUS
DN 110:191536
TI Edible oil compositions for prevention of allergy, **thrombosis**, and hypertension
IN Okuyama, Harumi
PA Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 63036744	A2	19880217	JP 1986-179608	19860730
PRAI JP 1986-179608		19860730		

AB The title compns. contain ≥20% α-linolenic acid (I) and linoleic acid (II) at I/II ratio of ≥1. Thus, rat feed blended with **Perilla** frutescens crispa seed **oil** containing I 64.0, II 12.8, oleic acid 12.3, stearic acid 1.9, palmitic acid 8.1, and myristic acid 0.6% by weight was effective in treatment of hypertension, allergy, and **thrombosis**.

L3 ANSWER 16 OF 17 MEDLINE on STN DUPLICATE 4
AN 89096332 MEDLINE
DN PubMed ID: 2905408
TI Effect of dietary alpha-linolenate/linoleate balance on mean survival time, incidence of stroke and blood pressure of spontaneously hypertensive rats.
AU Shimokawa T; Moriuchi A; Hori T; Saito M; Naito Y; Kabasawa H; Nagae Y; Matsubara M; Okuyama H
CS Faculty of Pharmaceutical Sciences, Nagoya City University, Japan.
SO Life sciences, (1988) 43 (25) 2067-75.
Journal code: 0375521. ISSN: 0024-3205.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)

LA English
FS Priority Journals
EM 198902
ED Entered STN: 19900308
Last Updated on STN: 19980206
Entered Medline: 19890216
AB Following the suckling period, stroke-prone spontaneously hypertensive rats (SHR-SP) were fed semi-purified diets supplemented either with safflower seed **oil** (rich in linoleic acid) or with **perilla** seed **oil** (rich in alpha-linolenic acid). The mean survival time of male SHR-SP fed the **perilla** diet was longer than that fed the safflower diet by 17% (p less than 0.001) while the difference was 15% in female SHR-SP (p less than 0.05). The mean survival times of female SHR-SP were more than 40% longer than those of male SHR-SP in both dietary groups. Post-mortem examinations of brains revealed apoplexy-related symptoms as the major cause of the death in both dietary groups. The systolic blood pressure was lower by ca. 10% (21 mmHg) in the **perilla** group than in both the safflower group and conventional diet group. The eicosapentaenoate (20:5 n-3)/arachidonate (20:4 n-6) ratio of platelet phospholipids in spontaneously hypertensive rat (SHR), a measure of platelet aggregability, was much higher in the **perilla** group than in the safflower group. Thus, increasing the dietary alpha-linolenate/linoleate ratio resulted in an increased mean survival time of SHR-SP rats, possibly by lowering blood pressure and platelet aggregability.

L3 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1987:514708 CAPLUS
DN 107:114708
TI Effects of **perilla oil** intake on bleeding time, thromboxane formation and platelet fatty acid in rats
AU Han, Yong Nam; Yoon, Hae Won; Kim, Sook Hee; Han, Byung Hoon
CS Nat. Prod. Res. Inst., Seoul Natl. Univ., Seoul, 110, S. Korea
SO Saengyak Hakhoechi (1987), 18(1), 5-13
CODEN: SYHJAM; ISSN: 0253-3073
DT Journal
LA Korean
AB Male rats were fed diets containing **perilla oil**, sardine **oil**, or corn **oil** for 15 wk in order to investigate their antithrombotic effects. Rats given **perilla oil** and sardine **oil** diets showed significantly longer bleeding time and less malondialdehyde generation during thrombin-induced aggregation of platelets than rats given corn **oil**. The ratio of platelet eicosapentaenoic acid (EPA, 20:5w3) to arachidonic acid (20:4w6) of **perilla oil**-, sardine **oil**-, and corn **oil**-treated rats were 0.54, 0.96, and 0.01, resp., suggesting that linolenic acid (18:3w3) of **perilla oil** was metabolized to EPA, which is known to have antithrombotic activity.